NCTS

On Gizatullin's Problem

10:00-11:00 on November 24 (Mon),
15:30-16:30 on December 1(Mon), 2025
@Room 515, Cosmology Building, NTU

15:30-16:30 on November 26 (Wed), 2025
@Room 505, Cosmology Building, NTU

Invited Speaker

Keiji Oguiso

University of Tokyo

Organizer

Jungkai Chen

National Taiwan University

Introduction & Purposes

Gizatullin's problem is a problem which asks if any automorphism of a given smooth quartic complex K3 surface is induced from a Cremona transformation of the ambient projective three space or not and Gizatullin's problem is not yet completely solved by now. Unlike its simple appearance, Gizatullin's problem is a fairly deep and interesting problem which involves K3 geometry, Cremona transformations, Sarkisov program, its variants for Calabi-Yau pairs, and their interactions.

Outline & Descriptions

In the mini-course (3 one hour lectures), starting from the meaning of the problem (eg. why it asks only for smooth quartic hypersurfaces in the projective three space, and so on) and my earlier contributions to this problem, I would like to present about some of recent progress around this problem by Professors Araujo, Paiva, Zikas and Professors Araujo, Corti, Massarenti, and others, with necessary tools.

Registration

Contact
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